

subpart A of part 435) during the first 0.33 X feet drilled with NAF where X is the anticipated total feet to be drilled with NAF for that particular well. The retort analyses shall be documented in the well retort log. The operators shall use the calculation procedures detailed in appendix 7 to subpart A of part 435 (see Equations 1 through 8) to determine the arithmetic average (%BF<sub>well</sub>) of the retort analyses taken during the first 0.33 X feet drilled with NAF.

6.5.1 When the arithmetic average (%BF<sub>well</sub>) of the retort analyses taken during the first 0.33 X feet drilled with NAF is less than or equal to the base fluid retained on cuttings limitation or standard (see §§ 435.13 and 435.15), retort monitoring of cuttings may cease for that particular well. The same BMPs and drilling fluid used during the first 0.33 X feet shall be used for all remaining NAF sections for that particular well.

6.5.2 When the arithmetic average (%BF<sub>well</sub>) of the retort analyses taken during the first 0.33 X feet drilled with NAF is greater than the base fluid retained on cuttings limitation or standard (see §§ 435.13 and 435.15), retort monitoring shall continue for the following (second) 0.33 X feet drilled with NAF where X is the anticipated total feet to be drilled with NAF for that particular well. The retort analyses for the first and second 0.33 X feet shall be documented in the well retort log.

6.5.2.1 When the arithmetic average (%BF<sub>well</sub>) of the retort analyses taken during the first 0.66 X feet (*i.e.*, retort analyses taken from first and second 0.33 X feet) drilled with NAF is less than or equal to the base fluid retained on cuttings limitation or standard (see §§ 435.13 and 435.15), retort monitoring of cuttings may cease for that particular well. The same BMPs and drilling fluid used during the first 0.66 X feet shall be used for all remaining NAF sections for that particular well.

6.5.2.2 When the arithmetic average (%BF<sub>well</sub>) of the retort analyses taken during the first 0.66 X feet (*i.e.*, retort analyses taken from first and second 0.33 X feet) drilled with NAF is greater than the base fluid retained on cuttings limitation or standard (see §§ 435.13 and 435.15), retort monitoring shall continue for all remaining NAF sections for that particular well. The retort analyses for all NAF sections shall be documented in the well retort log.

6.5.3 When the arithmetic average (%BF<sub>well</sub>) of the retort analyses taken over all NAF sections for the entire well is great-

er than the base fluid retained on cuttings limitation or standard (see §§ 435.13 and 435.15), the operator is in violation of the base fluid retained on cuttings limitation or standard and shall submit notification of these monitoring values in accordance with NPDES permit requirements. Additionally, the operator shall, as part of the BMP Plan, initiate a reevaluation and modification to the BMP Plan in conjunction with equipment vendors and/or industry specialists.

6.5.4 The operator shall include retort monitoring data and dates of retort-monitored and non-retort-monitored NAF-cuttings discharges managed by BMPs in their NPDES permit reports.

6.6 Establishing mud pit and equipment cleaning methods in such a way as to minimize the potential for building-up drill cuttings (including accumulated solids) in the active mud system and solids control equipment system. These cleaning methods shall include but are not limited to the following procedures.

6.6.1 Ensuring proper operation and efficiency of mud pit agitation equipment.

6.6.2 Using mud gun lines during mixing operations to provide agitation in dead spaces.

6.6.3 Pumping drilling fluids off of drill cuttings (including accumulated solids) for use, recycle, or disposal before using wash water to dislodge solids.

[66 FR 6901, Jan. 22, 2001; 66 FR 30811, June 8, 2001]

#### APPENDIX 8 TO SUBPART A OF PART 435—REFERENCE C<sub>16</sub>–C<sub>18</sub> INTERNAL OLEFIN DRILLING FLUID FORMULATION

The reference C<sub>16</sub>–C<sub>18</sub> internal olefin drilling fluid used to determine the drilling fluid sediment toxicity ratio and compliance with the BAT sediment toxicity discharge limitation (see § 435.13) and NSPS (see § 435.15) shall be formulated to meet the specifications in Table 1 of this appendix.

*Drilling fluid sediment toxicity ratio* = 4-day LC<sub>5</sub> of C<sub>16</sub>–C<sub>18</sub> internal olefin drilling fluid/4-day LC<sub>5</sub> of drilling fluid removed from cuttings at the solids control equipment as determined by ASTM E1367–92 [incorporated by reference and specified at § 435.11(ee)] and supplemented with the sediment preparation procedure (appendix 3 of subpart A of this part).

TABLE 1—PROPERTIES FOR REFERENCE C<sub>16</sub>–C<sub>18</sub> IOS SBF USED IN DISCHARGE SEDIMENT TOXICITY TESTING

Mud weight of SBF discharged with cuttings (pounds per gallon)	Reference C <sub>16</sub> –C <sub>18</sub> IOS SBF (pounds per gallon)	Reference C <sub>16</sub> –C <sub>18</sub> IOS SBF synthetic to water ratio (%)
8.5–11 .....	9.0	75/25

TABLE 1—PROPERTIES FOR REFERENCE C<sub>16</sub>–C<sub>18</sub> IOS SBF USED IN DISCHARGE SEDIMENT TOXICITY TESTING—Continued

Mud weight of SBF discharged with cuttings (pounds per gallon)	Reference C <sub>16</sub> –C <sub>18</sub> IOS SBF (pounds per gallon)	Reference C <sub>16</sub> –C <sub>18</sub> IOS SBF synthetic to water ratio (%)
11–14 .....	11.5	80/20
>14 .....	14.5	85/15
Plastic Viscosity (PV), centipoise (cP) .....	12–30	
Yield Point (YP), pounds/100 sq. ft .....	10–20	
10-second gel, pounds/100 sq. ft .....	8–15	
10-minute gel, pounds/100 sq. ft .....	12–30	
Electrical stability, V .....	>300	

[66 FR 6901, Jan. 22, 2001]

**Subpart B [Reserved]****Subpart C—Onshore Subcategory****§ 435.30 Applicability; description of the onshore subcategory.**

The provisions of this subpart are applicable to those facilities engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located landward of the inner boundary of the territorial seas as defined in 40 CFR 125.1(gg) and which are not included within subpart D, E, or F, *Provided, however*, That the applicability of this subpart to (a) facilities in existence on April 13, 1979 or thereafter engaged in the production, field exploration, drilling, well completion and well treatment in the oil and gas extraction industry which are located on land and which would have been considered “coastal” as defined under the interim final regulations for this industry (40 CFR 435.41, 41 FR 44942, October 13, 1976) or which are (b) located in the Santa Maria Basin of California is suspended.

(Secs. 301, 304(b) and 501 of the Clean Water Act as amended, 33 U.S.C. 1251 *et seq.*)

[44 FR 22075, Apr. 13, 1979, as amended at 47 FR 31555, July 21, 1982]

**§ 435.31 Specialized definitions.**

For the purpose of this subpart:

(a) The general definitions, abbreviations, and methods of analysis set forth in 40 CFR part 401 shall apply to this subpart.

**§ 435.32 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available.**

Except as provided in §§ 125.30 through 125.32, any existing point source subject to this subpart shall achieve the following effluent limitations representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT): there shall be no discharge of waste water pollutants into navigable waters from any source associated with production, field exploration, drilling, well completion, or well treatment (*i.e.*, produced water, drilling muds, drill cuttings, and produced sand).

[60 FR 33966, June 29, 1995]

**Subpart D—Coastal Subcategory**

SOURCE: 61 FR 66125, Dec. 16, 1996, unless otherwise noted.

**§ 435.40 Applicability; description of the coastal subcategory.**

The provisions of this subpart are applicable to those facilities engaged in field exploration, drilling, well production, and well treatment in the oil and gas industry in areas defined as “coastal.” The term “coastal” shall mean:

(a) Any location in or on a water of the United States landward of the inner boundary of the territorial seas; or

(b)(1) Any location landward from the inner boundary of the territorial seas